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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,717	08/09/2001	Richard Fischbeck	00-106	6856

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EXAMINER	
A, PHI DIEU TRAN	

ART UNIT	PAPER NUMBER
3637	

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/928,717	FISCHBECK, RICHARD	
	Examiner	Art Unit	
	Phi D. A	3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *32-38 and 42-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *32-38 and 42-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 32 is rejected under 35 U.S.C. 102(b) as being anticipated by Fernstrum (5340349).

Fernstrum (figures 1, 4) shows a structure comprising a plurality of conical elements (14), each conical element of the plurality of conical elements having a cone base, a cone wall and a vertex, the cone wall defined by straight lines (figure 3) that extend from the base and intersect each other at the vertex, the plurality of conical elements being arranged to form a shell such that at least one straight line of the cone wall of a first conical element extends substantially parallel to at least one straight line in the cone wall of an adjacent conical element so as to form a straight strut between the vertex of the first conical element and said vertex of the adjacent conical element, the conical elements being arranged such that a distance and a direction of displacement between any two cone vertexes of adjacently placed conical elements being infinitely variable between a minimum limit and a maximum limit (the limits not yet known, even a small distance can have infinite sections within the small distance).

3. Claims 32, 42-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Fuller (3203144).

Fuller (figures 3-11) shows a structure comprising a plurality of conical elements (3), each conical element of the plurality of conical elements (Webster's dictionary → cone: a closed

plane base and the surface formed by line segments joining every point of the boundary of the base to a common vertex) having a cone base(8), a cone wall(3) and a vertex (figure 6 where the walls 3 meet at the tip), the cone wall defined by straight lines that extend from the base and intersect each other at the vertex, the plurality of conical elements being arranged to form a shell(figure 1) such that at least one straight line of the cone wall of a first conical element extends substantially parallel to at least one straight line in the cone wall of an adjacent conical element(figures 6 shows the walls 4 and 3 being parallel, the ones on the opposite side of the vertex) so as to form a straight strut between the vertex of the first conical element and the vertex of the adjacent conical element, the conical elements being arranged such that a distance and a direction of displacement between any two cone vertexes of adjacently placed conical elements being infinitely variable between a minimum limit and a maximum limit (the limits not yet known, even a small distance can have infinite sections within the small distance), the angular deficit Alpha of the conical element varies in magnitude from the angular deficit Alpha of an adjacent conical element, the plurality of conical elements including two groups of conical elements, each group having different magnitude of the angular deficit Alpha, the conical elements of the groups being arranged in an alternating pattern (figures 12-13), a skin (5 or 6) that is placed over the shell, the conical elements being arranged with the vertex of the conical elements facing inward and the vertex of other ones of the conical elements facing outward so as to form the shell having an irregular shape, the conical elements being constructed of sheet material from a group of material consisting of paper fiber products, sheet metal, polymeric material, a fastening means (adhesives) for attaching the conical elements to one another, the conical elements are placed in an overlapping arrangement wherein a portion of the base of the

first conical element overlaps with a portion of the cone wall of the adjacent conical element so as to form the shell (figure 6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fernstrum.

Fernstrum shows all the claimed limitation except for the angular deficit Alpha of the conical element varies in magnitude from the angular deficit Alpha of an adjacent conical element.

Fernstrum further discloses that varying in size, materials, shape, form, function are deemed readily apparent and obvious to one skilled in the art (col 4 lines 44-52).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Fernstrum's structure to show the angular deficit Alpha of the conical element varies in magnitude from the angular deficit Alpha of an adjacent conical element because varying the size and shape of an element is readily apparent and obvious to one skilled in the art as disclosed by Fernstrum.

6. Claims 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chamberlain (4270320) in view of Fuller (3203144).

Chamberlain shows a structure comprising a plurality of curving elements (26), each element of the plurality of curving elements having a base, a wall and a vertex, the elements

being arranged such that a distance and a direction of displacement between any two cone bases of adjacently placed conical elements being infinitely variable between and minimum limit and a maximum limit (the limits not yet known), the element being a circular and said base being a circular base, the curving elements being placed in an overlapping arrangement (figure 15a) with a portion of the cone wall said adjacent element so as to form said shell, the elements being arranged such that the vertex of the circular cone points outward from the shell, the portion of the circular base of the first circular element overlaps a portion of said wall of at least three adjacent curving elements, so as to form the shell having a closed surface (figure 15a), the overlapping arrangement further includes an overlap of a portion of the circular base of the first element with a portion of the wall of at least a second element, a third element, and a fourth element, a first amount of overlap between the first element and the second element forming a first strut distance and direction between the vertexes of the first element and the second element, a second amount of overlap between the first element and the third element forming a second strut distance and direction between the vertexes of the first element and the third element, a third amount of overlap between the first element and the fourth element forming a third strut distance and direction between the vertexes of the first and fourth elements, the first strut distance and direction being any distance and direction between the minimum and maximum limits (the limits are not yet known), the second strut distance and direction being any distance and direction between the maximum and minimum limits, the third strut distance is any distance and direction between the minimum and maximum limits, an opening is formed in the shell to provide access to an inner space of the shell (col 2 lines 7-12), the element having an element length defined by a length of the wall from the base to the vertex and wherein the maximum limit is slightly less

than a sum of the element lengths of any two adjacent elements, the element having an element length defined by a length of the wall from the base to the vertex and wherein the minimum limit is slightly greater than one-half of a sum of the element lengths of any two adjacent elements.

Chamberlain does not disclose the elements being conical elements.

Fuller discloses overlapping conical elements forming the geodesic structure.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Chamberlain's structure to show the elements being conical elements as taught by Fuller because the conical elements enables the formation of a decorative dome shape structure as taught by Fuller.

Response to Arguments

1. Applicant's arguments filed 9/14/06 have been fully considered but they are not persuasive.

Applicant states that Fernstrum does not show straight strut formed between vertexes of adjacent cones, examiner respectfully points out the following. First of all, the reference shows a structure having two vertexes spaced apart as noted by applicant. There is a distance between the vertexes. The walls of the adjacent cones are substantially parallel as claimed. The distance between the struts is inherently able to form the straight strut as claimed. If applicant means the strut to be the distance between the overlapping parts of the conical structures as demonstrated by exhibit A, applicant is respectfully requested to set forth the limitation in the claim. The argument is thus moot.

With respect to Fuller, the different figures of 3-11 shows different parts of the overall assembly. Fuller figure 11 by itself shows a conical structure (Webster's dictionary → cone: a

closed plane base and the surface formed by line segments joining every point of the boundary of the base to a common vertex). The structure of figure 11 thus meet the definition of conical element as claimed. Although each section 4 is a diamond shaped panel as set forth by applicant, the assembly of the sections 4 in figure 11 resemble a conical element as claimed. The argument is thus moot.

The argument to the 103 rejection to Fernstrum is also moot in view of the reasoning set forth above.

With respect to Chamberlain and Fuller, Chamberlain as modified by Fuller, results in a structure that is decorative, and conical per the conical teaching of Fuller. Applicant's statement to "right cones" is moot as it is not claimed. Applicant only claims a conical element, not "right cones". The argument is thus moot.

7. Applicant's arguments with respect to claims 32-38, 42-47 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different geodesic structures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phi Dieu Tran A

11/27/06